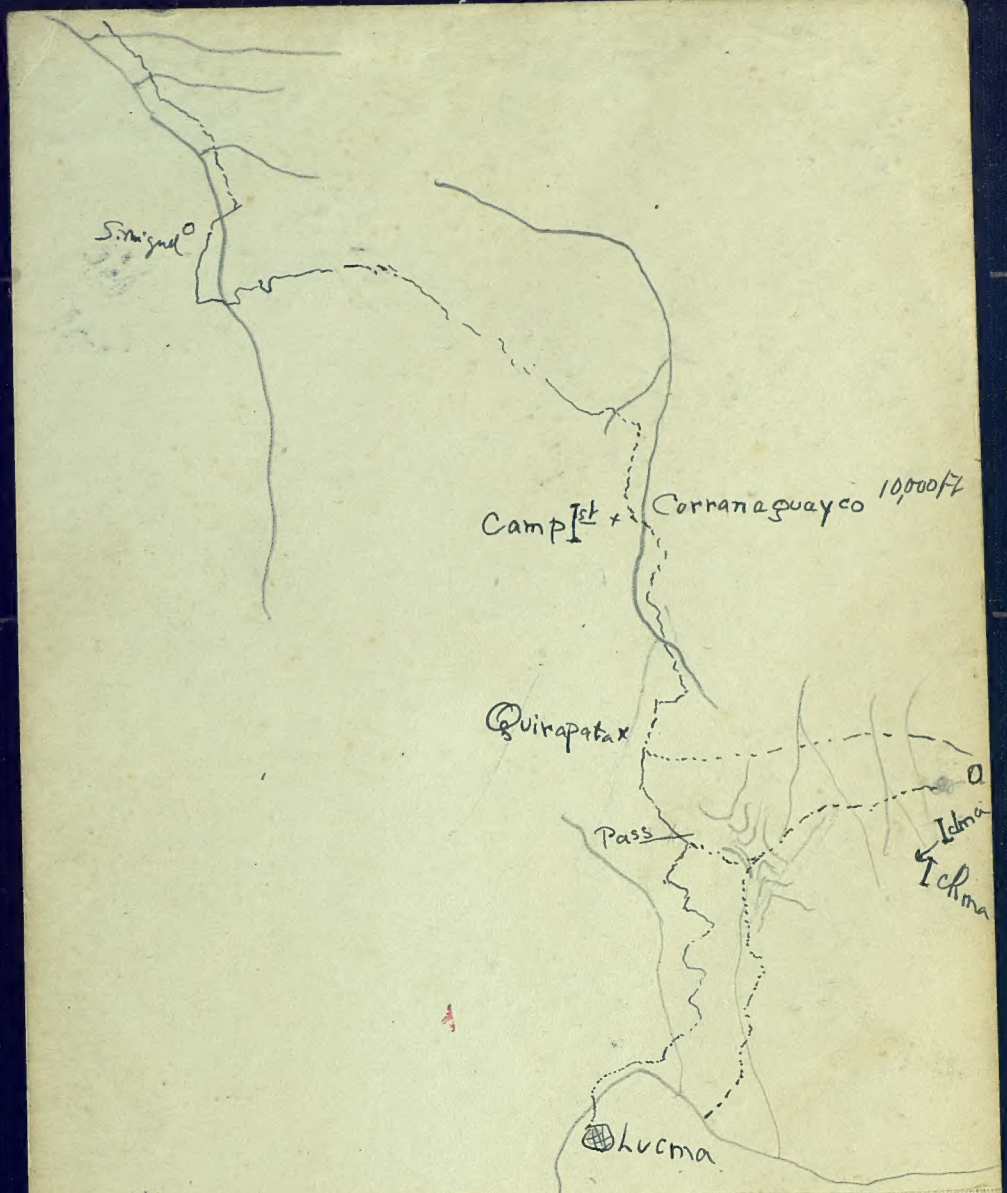
4



AUG

Pucura
Puquiura

No. 4

Aug. 14: We left Allanlaytambo for the Yurqui ~~Mayed~~ Rubber finca of Alvarez. Took 7 pack mules + 8 extra ones with empty sacks for skins of Pucyura ~~Paquiura~~. Had accompanied me to San Miguel Prefect with day we reached Nagruna late at dusk + camped about the It Rained during the night. On the way down it was clear + warm. Just below Torontoy in the canyon I noticed several new (Podocarpus) trees growing close to the road side which are the first I have seen. Farther down I saw several the large yellow alders seen at Tocoprogan in the Ocobamba valley.

(15) Weather. Raining during the morning but at 10 Am. it cleared + we left for Santa Rosa just above San Miguel a half league in ~~distance~~. In ponds I saw quite a few small fish. At mouth of these ponds were fish traps made of cane like large baskets with a basket in the bottom for trapping the fish. Above the traps were four poles set so as to cross above the ~~confluence~~ of San Miguel we left Marcos + Lewis with extra mules to bring down the ~~to~~ boxes left at Malcha Pachan. On the way down the canyon I saw a flock of red fronted green parrots feeding on blossoms of the ~~erythrina~~ trees. Saw no new birds altho the road was deserted it being Sunday. After leaving

the canyon at Colpani bridge the character of the country changes radically. The granite rocks cease here as does the montane forest. Below Colpani all the way down the mountain sides are bare of trees & are grass covered with a few patches of trees near the river only. This may be due to constant burning but it is so complete that the change in formation probably accounts for it. The canyon mouth is granite & is forested. Below Colpani there is no granite, only shale & conglomerate with grass covering. Saw many fish traps below Colpani. During the rainy season the river increases 100% in volume & large streams such as Rio Calcantara enter it. Below Colpani the trees are quite different in genera from the canyon, most of them growing into size & covered by long streamers of Spanish moss (Bromelia) & look gray in appearance. Saw a large species of lizard on road side. Shot a large species of little color & fact. Near Bullenger saw a medium sized blue Heron in the river. The small birds seen along the road were the same species as I got at San Miguel. We reached Santa Rosa at 5:30 P.M. & camped near the roadhouse.

(16) Night warm & clear. Left Santa Rosa at 8 A.M. reached mouth of Vilcabamba River at 10 & then traveled up it to Pallatamba where we arrived at 2:30. P.M.

The chief tree along the road & riverside is a tall spidery acacia. Pithecolobium Below Santa Rosa the large festoons of Spanish moss were not seen but a short moss like species which covered the limbs of trees took its place. At Colpani we saw the first black vultures & they continued common to Pallatamba. A conspicuous bird was the green billed, yellow tailed Oriole Cassique, colonies of the long pendant nests of which were seen near the road suspended from trees. The aneroid gave 5,100 ft for Pallatamba. The finca consists of sugarcane with a factory for making sugar & aguardiente. Dr. Olcart, the administrador, says monkeys are only found a long distance from the finca in the higher forest where two species occur, a small gray one & a large black species. He showed me a large black Cuvierosoma, domestic, which lives in the patio & came from the San Miguel rubber finca.

(17) Remained all day at Pallatyambamba. At noon Marcos + Lewis came in with the bats from Machu Picchu. I tried to shoot bats at sunset as they flew from the tiled roof of the factory but they left at a terrific pace. Most of them flew like molassus but appeared light gray in color. Cliart said that near Pucyura there is an old mine shaft filled with bats. He gave me a letter to the commander so I could get a guide for the cave tomorrow. The sand below the finca there was another mine or cave occupied by bats. In coming down the Urubamba valley I saw 2 mine shafts running into cliffs at the road level. There I will explore for bats on way back. He also showed me a large woodpecker size + color of our Ivorycock, which was shot on the finca.

(18) Jose caught in the cane fields 14 mice of 3 species, & them were Sturnira lilium. In color & a large Oryzomys, the other a yellow Phyllotis. Broke camp at 8:15 + moved up to Lucma. On our way we passed thru many forest patches but saw no numbers of large birds. The yellow-rumped cacique + the olive cassiques were common birds. When near Lucma saw many small birds of the invisible type some of which were near to me. Shot a medium sized golden yellow woodpecker + a rufous crested wood hewer. It rained hard for ½ one hour at 12:00 P.M. just before we reached Lucma. At Lucma we found the inhabitants all away at Pucyura attending a fiesta. The village is situated in a slopping wide valley with mountains on both sides but no really heavy forest.

(19) Remained at Lucma waiting for a guide for San Miguel but none came on account of fiesta at Pucyura. Spent the afternoon visiting the bat cave in the old mine tunnel that Cliart told me of about. The bats were near the mouth some 15 feet inside hanging in clusters to the roof. Beneath them was a foot deep bloody mire composed of bat dung but it was pasty + our feet sank into it to the bottom. I shot some half dozen + then caught 5 others but the rest retired farther in the tunnel but we could not follow as the mire was too deep on the bats. There were all of one sort, Desmodus, the blood sucking vampire much larger than the Mexican race. Both sexes were collected but the ♀s were much the larger. It did not rain in the afternoon but clouded up as if it would. Pucyura is some 9,500 feet in altitude which is close to the upper limit of this blood sucking bat.

Saw black vultures as high as Pucayura where they were common. Altho Incawa + Pucayura are at the same altitude as Ollantaytambo they are formally much lower + practically in the montaña zone. They have much more rain fall and are more with forests clinging to both sides of the valley

(20) Jose caught 3 mice last night at Incawai; one Eumops montana, + a long tailed Eumops of small size. Left Incawa at 8:30 a.m. for San Miguel. The road wound up the side of the first stream from the west entering the Vilcabamba below Incawa. The hill was heavily forested but the trees small with the foliage general + appearance like oaks. Many tall trees pierced the forest, also some bamboo. At the crest of the ridge at about 12,000 feet perhaps the forest gave way to the long bunch grass of the high country On the summit the country was rolling + open, with cliffs or forests in the distance. Just over the summit in some meadows we saw a pair of gualata geese + several flocks of large plovers, also carrion hawks + ducks. We made camp 3 hours down from the summit in a sheltered valley of small trees + bamboo on a clear creek where a road had been cut but had been grown over + the grass pasturage for mules was good. Saw no birds that night.

Corcanguaya

Altitude of camp just 10,000 ft. I did not have the aneroid out at the summit but should say the crest was not much over 12,000 feet as the drop down to the camp at least 1,000 is not sharp. The Incawa pass is marked 14,800 ft could be seen but looked very little higher than the S. Miguel pass. There are no mountain peaks nearby + it is doubtless much under 14,000 ft. The guide said the name of our camp is Corcanguaya after we had camped. Berg's rubber pack outfit came in from Pucayura + camped with us. It rained from 4 P.M. to 6 more bitter much by a minute fly size of a pin-point + gray in color. They were dreadful.

(21) Caught 4 dark brown Oryzomys like the species just taken at Cocabamba Valley but richer in color. But the camp early day clear + warm. The road crossed over after 2 miles to another valley + then on to a forested ridge which we followed for a league, then it dropped steeply down for another league to the San Miguel River. Here we struck heavy forest of large trees + a fine wide road cut thru it which descended gradually. Saw only a few birds + no mammals. Followed the river for 3 leagues to a hut + field + San Fernando where we camped at 2:30. The owner had a tame Parahil + a black woodpecker + a green parrot, also a family of 4 children. The vegetation along the way was for the first league bamboo with a few small trees. Then on the ridge were many large leaved trees + palms. Also a tall, slim stemmed palm + tree ferns. Altitude of ridge about 9,000 ft.

along the San Miguel River grew a great variety of large trees. Saw many cedros & Miller figs. Prickly stemmed palms were also common & a large stemmed bamboo, also 2 species of Cecropias & many tree ferns. The altitude of San Fernando by our aneroid was 4,400 ft. The owner said brocket deer, agoutis & ocelots were common but few monkeys and no tapirs. Peccary were found here also & the great anteater occured. Parakeets, parrots & other birds were common. The savages of the Machiganga tribe wander so little in the forest and are timid & have learned to keep out of sight. They raised a little sugar cane, coffee, peanuts & vegetables. Two species of squirrels occur, one very small & a large one. Armadillos are found down low. Rocky rubber gallery & pineapple is called Yuvini

(22) We left San Fernando at 8 A.M. & arrived at Yuvini at 1 P.M. A day clear & warm at noon. Saw only a large squirrel on the road, & few birds chiefly Tanagers & jays. Saw my first Machiganga savage a tall naked man with drawn bow standing on the river bank waiting for fish. He stood across the river & below me & did not see me as I passed. He looked like the savages of the Amazon in the geographies. Later at Yuvini we saw other more civilized & clothed. Berg was away in the forest with his rubber gatherers when we arrived & did not return for a day or two. His station is situated on a wide valley with cleared forest but marshy land bordering it. Here are bananas & oranges in number & the Indians have a cane field & mill for making aguardiente. Close by Corn is raised higher up in the hills we bought some for the mules. From the station a grassy ridge called the Pacaual rises 1,500 feet above & can be seen where there is good pasturage. The aneroid registers just 3,000 feet at Yuvini. The Pamparomas River joins the S. Miguel only about a league above here at the junction making the Cosireni River. Canoe navigation is said to start about 12 leagues away but there is no trail to the place from Yuvini up the Pamparomas

(23) We caught no rodents in the bush near camp. Marcos & Lenis left early with the mules for Ollantaytambo & I waited for a guide in the morning but as none appeared I went out in the afternoon to the cane-field about a half hour down the road. Found no agoutis or squirrels but an Indian took me to an agouti's runway at the edge of the yuca field. When we arrived we found a Machiganga Indian but there with a hole facing the runway & a bit of corn as bait in front of the hole some 3 feet away. A Machiganga Indian with a bow &

arrow was inside waiting for the game but moved away timidly when we came. Two other Machiguengas in the forest with them were seen but others disappeared also quickly. Berg says this bunching method is their usual way of getting any sort of game. Saw several yellow tailed cassiques & shot one. A large tree containing their long nests was in the game-field. Shot 2 of the large red headed woodcocks & heard several other drumming birds. A large toucan was seen in flight & + 5 of these were shot. Two small slate hawks & turkies were also shot in the field. Parrots flew overhead & a large tame one talked. Inside of the house where a couple pigs & boys was erected for preserving the game. Berg came in from the forest in the afternoon & I went over & talked to him in the evening. He is a Norwegian who talks perfect English having lived 2 years in London but without any acquaintance in the U.S.A. He is about 50 years old & brown haired. He reported a rare sort of one seen by him. Afew days ago he shot a lesser curassow which is also rare. The monkeys were howling near the river but more distant on the slopes. He says the river here is the Cosireni & flows in above the big bend. The next river below to which there is a good road is the Comberciato & this enters the Perebamba at the bend a few miles below the Cosireni. From the grassy pampas ridge the whole country is visible. Up the Comberciato there is some game & the country is lower but malaria is prevalent. He says that slave raiding still goes on for rubber gatherers labourers for the lower Amazon. The Indian lives down of another tribe come up into this country in the dry season & in moonlight nights capture families of Machiguengas & take them below as slaves. These Indians have contracts & absconding makes no profit. Last year he lost 15 pounds presumably in this way. Berg has found a great many old Spanish mine roads & some traces of gold gold mines. All the roads led to Conservidiva & the whole country is known to the only Spanish. He has many stories of rich gold mines known only to the Machiguengas.

(24) Went to the Pachaual with a guide via the mule road which crosses the Cosireni on a suspended bridge. Saw no monkeys or other mammals. The Pachaual is a good pasture

the grass ~~being~~ growing on dry hard clay ~~and~~ in scattered condition. Saw a few condors flying about the mules + cattle which are there. Shot 4 Wood pigeons of a broccoli brown color. They utter ~~a~~ a very pleasant soft whistle. Shot a ~~pair~~ goatsucker in the trail also an olive backed trogon of small size. Small birds were quite absent. One peculiarity is the absolute lack of hummers anywhere. Flycatchers are also quite rare. Most of the birds are large ones + few in number. The rocks in place along the road up the hill are soft slaty shales. On the floor of the valley are large granite boulders along the road but they all come from the headwaters of the river

(25) Remained in all day skinning birds. Joe caught an Opossum yesterday + another today out of 60 traps set. Rodents are very rare here this may be due somewhat to the great prevalence of carnivorous ants + the hard clay floor of the forest. Living in the palo santo trees in the forest is an amber colored ant which bites like fire + is very disagreeably painful. Cloudy resembles those encountered on Cocos Island years ago. It lives in the bark of this tree only but this tree will grow everywhere near streams

(26) caught nothing in the 4 steel traps set near the lower road. Went with the guide to the Culpe del Mono. Found a troupe of 3 + shot at them with the 2 c but secured nothing. They were large blacks ~~fellows~~ spider monkeys + appeared to be fairly tame but we could not find them again. Saw several ~~birds~~ of the ~~small~~ Golden partridge, ~~also~~ in the forest, also 2 species of the rails + ~~toucan~~ wood. Peng says that a bush dog occurs here. They occasionally come in pairs near the house + kill chickens. The stinging amberant lives only on the Palo Santo tree a small straight tree with long elliptical leaves 1 ft. long. This tree grows chiefly along rivers + in such places in the forest + seems never to be without the ants.

(27) Went ~~out~~ across the river to the Culpe again today but saw no monkeys or other mammals there. On the return at Yavisa Creek we saw 3 small black tamarin monkeys running along the bank in the bush but they were so quick that none could be shot. They appeared to be black + about 1 ft long in body. Shot a crested golden-green quail in the forest from a band of 6; also a crimson red quail done. When I returned to camp I found the Madrigangas had brought in a red + black Oligodon snake which when I eviscerated it I found a snake of another species inside nearly as long as the other which was in fresh condition so I preserved it. I have only seen one species of lizard here near the houses. There are more along the road or in the mountains.

It rained last night accompanied by considerable thunder & lightning. It rains somewhere in the hills nearly every afternoon but seldom down here in the valley. The hill country here is without any dry season, rain falling the year round.

(28) Went out shining last night as the moon allowed 2 hours before rising. A large galinsoga was seen on the road in numbers & shot & 8 & 2 #5, the latter were different in color and contained eggs ready to deposit. Shot a fine 9 redeer, size of the gray but red in color with blackish head & legs, exactly like bush buck of Africa in general body color. This one contained a naked embryo the size of a gray squirrel. Stomach contents was several oleo the fruits of palm, pieces of orange fruit, Solanum, & large soft fruit size of a prickly pear; also many leaves but no grass whatever. Teeth worn, sublingual pit small. Several families of Machiguengas came to see the camp this morning. The women wore long robes & were much ornamented by necklaces of seed pods, pieces of plants, claw bills, heads of species of toucans & raw parts together with shells of tortoises & monkeys.

The men were less ornamented with only a few beads in the lobes with a cross or wad of parakit feathers. They had the sticks & were streaked with red pigment from a cultivated plant. They for the meat of the birds which I gave them and they were also much interested in the scissors. One of them had a shotgun & all had machetes or large knives & bows & arrows. In the late afternoon I went over to the station & saw the skins Berg has gathered. He had one golden pheasant tailed anteater, one ocelot, one collared pecarry, one white lipped pecarry, & 4 deer skins all of which were red like the one shot, none being bay colored. A good many Machiguenga arrows were seen in one of the houses made of a reed shaft with a cedar head & feathers at base with a spiral twist. Some of the feathers were macaws. The bows are made of very hard wood which is deep black like ebony. It is obtained from the stem of a slender prickly palm. A large pecary (collared) was seen today feeding about the place.

(29) Saw nothing last night on the road down for the bridge which stunk. We took out the

morning with the guide for peccaries near the cane field but saw nothing around with any tracks at the eclipses in the forest. In this district the natives know of few poisonous snakes and of no really large ones like boas. This is remarkable considering that poisonous snakes occur higher up + large ones in the Amazon Valley lower down. Lizards also few. The lack of snakes generally may be accounted for by the absence of rodents. Along the road were seen artificial platforms or nests made by the Muscivorgas in a tree bearing olive like fruit which is eaten by many birds + by deer. From these platforms they lay in wait for the birds. Berg says that the boys often come + eat bananas placed on platforms to dry near the houses. By using strychnine he has killed many, but only 2 species: one with white stripes on the face (Arbeu) + the other uniform gray-brown in color. Strychnyos The rubber he collects in the forest is the kind called jevi, a species of Para rubber. The common caucho does not occur here. The rubber trees occur lower down the river a few miles and are tapped annually for rubber.

30 Shined for up the road for 3 hours last night + shot a Bassaricyon from a tall tree in the forest. We first noticed it by its peculiar cry which was uttered when it saw the light.

later we saw its eyes which shined very brilliantly like those of a deer. This animal was about the size + color of a raccoon but resembled exactly a binturong but the tail was lacking. The stomach contained fruits + green vegetable pulp. In the morning I went with guide + Carlos up the road to the pachinal + over as far as the great bend of the Urubamba. Here we looked down upon the entrance of the Cumbercilla at the bend but the correct entrance was behind a ridge + further up. Well up the river a bare grassy or burnt red hillside was pointed out as Pasiluna. Along the Urubamba River we could see many sand bars + level beaches with bush + forest. On the ridge road we met a troop of brown monkeys or pelicid shot. They kept calling pulling a peculiar squeak or whistle. The guide Mariano decoyed them by pulling a whistle + shaking a tree simply imitating thus the noise made by a monkey jumping into a branch. They came to this sound twice + both times I fired at a monkey. They could be seen peering at us thru the trees. About a dozen

monkey were in the troop. The last tip was without a pad but a cuplike + was undoubt prehensile but not greatly so as the was seen at the tip. Stan H rushed for the trees many parrots but could see none sitting although the trees were small. It is remarkable how impossible a green parrot is to see in a bush as it is perfectly still. The guide with his remarkable eyesight was not able to see them either. On the way back I shared the road but got a glimpse of a Bassaricyon and the Bassaricyon and the old one. She called to us like the Bassaricyon we previously saw. It was high up in a tree in the middle of the road. Then on the way down the bridge a large rata male rodent in road but it ran into the bushes when we approached. The height of the Jantheca pedicel which is directly above the great bend of the Urubamba is 5,000 feet, the trail crossing being 4,800 feet where it passes the river. Cloudy, The climate is cool + there is a heavy gumbag grass, shoulder high in place. Much like open country is covered by tall bushes, pteris aquilina 6-7 feet high + thistles looks much like our northern pine slopes near pine forests

31 Rained nearly all day beginning at 7 A.M. with a thunder shower

The Bassaricyon had large pink glands at the angle of the mouth + a large naked patch on the throat. Heard the large black spider monkeys calling at 2 P.M. across the river. Remained in camp all day. Berg returned yesterday from the urubamba with sciatica rheumatism

Remained in camp all day.

Sept. 1 Went out again hunting Black spider monkeys across the river with another guide as Mariano had a bad ear. We went further up the river than before, as far as the edge of a large ravine where we heard the monkeys yesterday but saw or heard nothing of them. While we were waiting at noon we sat up on a side hill we heard the chirping + soon saw a troop of squirrel monkeys. They were in small trees near the ground + when we squeaked at them they came in sight in twos + threes. I shot 4 with 4 shots some 40 yards away + 2 others were seen later. These were blacks with white faces + brown rump. They have a slight mane + appear to be close to the Midas bicolor in coloration. We saw no other mammals + very few birds. Took up the steel traps on the road + found a large marmosa in one but badly mutilated + dead (killed by ants). Day cloudy but no rain. Saw much of the yellow intercalate fruit-eater which is afond of the monkeys. Name Stinky

(2) Remained in camp skinning monkeys
Rained quietly part of day. At night went
skinning up the road + shot another
Bassaricyon at same spot where I shot
the first. It was a ♀ but smaller + less mature
than the other. It first attracted our notice by
a rattling cry. The stomach contained
yellow vegetable pulp of some fresh fruit.

(3) Bride's ears was still bad so could not start
for the Rio Comberciato but Berg went for
another guide who arrived in the afternoon.
Went up to the pass but saw no
monkeys or other animals. Took supper
with Berg who furnished - both of Spanish
Sherry + some home grown tobacco. Tobacco
grows well at Urumi and is of good quality
but as it is a government monopoly it does
not pay to grow it.

(4) Started at 8:45 A.M. for the Comberciato with
one pack mule + saddle mule, Jose + Cevillo
+ the guide. On the ridge overlooking the Urubamba
we met another troop of the brown capuchin monkeys
shot one of these. His stomach contained caterpillars
& a purple fruit pulp. We camped at the
Tambo on the Comberciato which has a fine pebble
beach. The altitude here was 1,800 feet. Rained during
the night + afternoon.

Here we saw a pair of otters fishing in the
river without showing any fear of us. The river
is broad some 50 yards + quiet without any
large or rough rapids. At night we went out
with the light but saw only a few large toads
+ a great number. Shot a black curassow
having a white crest. Saw a pair of the large
slaty limpkins. They are the size of a guinea hen
& of a similar color. Saw some of the large bats of this
genus Phyllostomus mega phyllus at the camp at night.

(5) We travelled up the river to the upper
rubber station of Shakroya arriving at 7:45 P.M.
A.M. Very rainy. Two hours up the river
we reached a Machiganga village with about
15 people, some of whom the same who visited
us. On the road I saw several more of the white crested
Penelopes + a pair of the red tailed squirrel but did
not see any monkeys or limpkins or any
track of tapirs, pecaries or deer. The road ran
was soft + slippery in places. The river continued
broad + without large rapids all the way
to the Shipipa station. Drove surprised to
find it only 2,100 feet. or 3,000 feet below
first camp which is 15 miles down the

(6) Rained [illegible] shot 4 [illegible] 35, all

(7) Went shining last night + shot an opossum hanging in a tree very peculiar in color + with very long tail + naked along underside, only for a long way. The genus is Philander. During the night a vampire bit the guide on the forehead. I noticed a bat come in + flutter about me several times but was not attacked. It is possible that this bat is the rare genus with white spots + wings + attacks people chiefly, our mules were not bitten while the Desmodus which attacks mules never bite men.

Berg told me he was also bitten by a bat on the Comberciato. Stopped on the summit of trail on crest Untill night + shined the road for a distance of 9 miles to Guerini. Saw only deer on forest road below pacimal. Nothing seen in the pen grass country. A pacimal on the other side of pit. Shined a small tree which was night make in a small tree which was climbing. Eyes glared large + red. Arrived in camp at 11 P.M. Shot another Cebus on the summit at dusk as they were about to roost for the night. The band numbered about 50 + were very timid scolding in all directions, only one returning to the call note + translating.

(8) Remained in camp all day skinning the mammals + birds shot on the Comberciato. A few light showers passed over at midday

(9) Went over across the river for the black spider monkeys but neither saw + heard them. Saw a red deer mazama, at one of the culpeo which ran up the bank + then stood behind a tree with only the hindquarters + head visible. I fired + then with the rifle + then she went a few yards + stopped behind another tree. I fired again + she went away but dropped dead down hill. A fine mature male. Saw at the same time a female + young animal with shaggy gray coat.

+ The tops of stars were sometimes fully visible on Lagunas all [illegible] Rapids + the [illegible] in these spaces

It was probably a prehensile tailed animal but I could not see it distinctly. Before I could get the shot gun from Rose it passed out of sight. On the way back we went down to the river & on the sand flats I saw the tracks of a tapir but only in this one place. Saw also a cat like track size of ocelot but no deer or heavy prey tracks. Shot one of the large slate colored tinamous also 2 brilliant blue & black tanagers. Rained at 2 P.M. & against 5:30.

(10) As Narciso had heard the monkeys calling down the river slope we returned to today but saw no monkeys or heard any. At 4 P.M. we returned to the road & went down the path from which we started to where the principal camp was before, however. Near the culpe I saw a small brown viper coiled lying on a dead palm stem of the same brown color. The viper showed no movement but kept coiled & I shot him. This is perhaps the same species as the Machiganga recently as he had holding a limb in climbing a tree. The man was very sick but recovered.

(11) Went again for monkeys across the river with our Indian guide who promised he could find them. We took up the largest tracks & results had us on a trail leading to a valley of black shale. We found no monkeys but shot a red headed tinamou & saw one more tinamou & the guide said there are three species of monkeys here: 3 red ones, 2 black, 2 small ones & 1 parti colored & 1 night monkey.

(12) This morning a Machiganga guide of the bridge across the river above camp came in to see me & met with him and the Mayordomo. The bridge was very shaky & consisted of long poles lashed together with bark thongs. We went up the hill & down into the bare culpe & first stream & met a troop of about 8 black spider monkeys. I shot into 4 of them at close range but failed to knock any down. We then went down the culpe to the river & returned along the shore. Saw no deer or otter tracks in the sand or mud. The usual squirrel. No large birds were met with. Day clear & warm with a good breeze.

(13) Another sunny day with a good breeze. Left camp at 9 A.M. with 2 guides & one pack mule for the commercial. Camped at the 1st Tambo of the Playa where we arrived at 3 P.M. Shot another large slaty Tinamou &

also one of the swallows, size of a lobulate. Which is the
Shot 4 new birds, one red shrikehead, another
crested kingfisher, a tiny tody tyrant
barbet, also a long tailed bird, & large bill & bird
another one of the large grooving Parrots. Set
other traps in river but saw no others. Water muddy
& low not high, at dusk many of the large
Phyllostomus bat
pigeons appeared flying in flocks above the river
a pair ♂ + ♀

(14) Caught nothing during night in steel traps or rabbit
either. Very bright & clear. Remained in camp
skinning birds while guides went up the
Postachiato. At 4 P.M. we caught a fine
ad. ♀ otter in one of the small steel traps which
I set at base of large tree. This one was not
very large, not the great Brazil species
contained 2 small embryos. Stomach
contents fish bones only; condition fair.
We also caught a fine gallinule by a toe on
body in one steel trap at noon by the log
The guides came in late without having seen
anything or fired a gun, but found many
Machiganga stapling traps in forest.

(15) We moved up to the Machiganga village at
Shan. On way saw 2 Parrikes + 3 white crested
curassows but no mammals. Took photos of
Machigangas, houses + back. Also traded for
knives for arrows + bows. Ate one howler
the skull + meat of a freshly killed red howler
monkey. Traded also for a set of Panpipes
pipes which they make of reeds of various
lengths. At dusk one Machiganga brought
in about 30 small fish of 5 species, 2 new gobies,
2 shiners + a cat fish. These he caught by hand in
rock pools

(16) Went hunting howling monkeys with a
Machiganga. We went above the village &
some culpes where we could hear them
howling at 8 o'clock. We found a troop
of about 10 + shot 6 of them: 1 old ♂, 2 old ♀s
2 y♂s + a young y♀. They did not leave
the tree together but some stayed for a half
hour high in the branches after we had fired
& the others made much noise. They
are quite stupid & decidedly compared to
the dark black spider monkeys. The
throats of the old males are enormously
swollen + bare when the larynx is enlarged.
with sperm not
Stomach contents of all were figs which
occurred abundantly in the forest. Left
at 3 P.M. for Serin where we arrived at 9:30 P.M.
& found M & F in camp.

(17) Remained in camp shooting monkeys & birds. Day rainy.
(18) Went monkey hunting across river but saw none. Day rainy all day. Shot a new black ~~curassow~~ ~~Pauxi~~ ~~a pawi~~, also a new ~~ayadala~~ or chachalaca near camp & also a bright & red crested finch. Saw a kingfisher on Urubi creek, the first I have seen in Peru.
(19) Day rainy. Went to bridge & set the net in a stone bordered channel.
(20) Caught nothing in fish net as leaves blocked the entrance. Caught no bats in the rat trap. ~~Baited with banana~~ Set for bats at the fince. ~~M & F~~ left this morning for the month of the Cosireni with 8 Bruchua carriers. Shot small birds near camp where ~~I~~ obtained 6 new ones & 3 already taken at San Miguel Bridge. Day misty this morning but ~~it was raining~~ did not start until 10:30. Made camp at the mouth of the Potaziato at 3 P.M. Saw no Monkeys or birds in road. Shot 5 ~~the~~ large bats at camp. They showed
much variation in color. The net was nothing in the other traps, ~~but~~ the river was much higher & very muddy at mouth. Day clear & warm. Saw nothing in road up. The Machiganga ~~s~~ did not come to camp as they were all drunk with chicha & celebrating. The guide caught 2 catfish in river with hook & line.
(23) The Bruchua guide & four Machiganga departed this morning up one of the tributary streams for black spider monkeys which live higher up & 2 days journey away. Went up the road to where we shot the squirrel monkeys with Jose but saw no mammals or large birds. Shot a blue ~~magpie~~ jay on way & later ~~two~~ others at camp. The whole forest country here & elsewhere in vicinity is ~~also~~ without mammals practically. No rodents are in the woods & traps catch nothing. Opossums or ~~raccoon~~ raccoon baths are scarce, rats, & squirrels. Small birds are also rare & large ones are also seen although there are many different species. I think this absence of mammals is due to the

great abundant of biting flies of many species. Carnivorous ants do not molest us & Nuch bush cannot be used. The mules here are bothered constantly by flies & do not rest to lie down in the forest within a short time biting flies are about in such numbers that it is necessary to move. Vampire bats also must kill many birds & small mammals at night. In Africa where game is abundant flies are never a great pest as they are here. The vegetation is luxuriant & with it would go an abundant fauna if the flies & insects generally would allow mammals & birds to exist freely. Day clear & warm.

(24) Santos the guide & 4 Machiganga returned this afternoon with 2 Woolly Jaguarundi, ♂ & adults, 3 Black Ateles & a baby ♂ Red Howler Alouatta. They also had a black Umbrella Bird & 2 large Penelope Parros. The Ateles ♂ was very large, exceeding the ♂ & her sexual organs were quite Hyaena like. That is, the clitoris was very long with the vagina a slit to its base. The ♂ had small black bristle like testicles & the sexual appearance is not much

I shot a ♀ & a full grown virgin ♂ of the red, black Howler, a very peculiar state for the variable species. The monkeys here are very local & not generally distributed or wandering. It is necessary to move from spot to spot & the various species, the black Cacajaos, squirrel monkeys, Cebus are except as to the latter rare & must be sought for. The latter are more abroad & may be met anywhere but are rare. Day cloudy & partly rainy

(25) Remained in camp skinning monkeys & birds. Santos went out for squirrels & brought back a small olive one not previously seen by me. The Rusty red species I saw several days ago & failed to get. He shot a Pauxi pauxi & 3 white headed Cassicus. Also a large yellow tailed Parrot. Donald a large Ramphastos Vitellinus & I each shot a yellow winged Sericide finch. Day cloudy with some drizzle. Went shining at night on the trail below camp. as the culpe de Paro I shot a large tree snake 7 8 inches long. The eyes shone well as it lay head downward on a vertical tree stem 3 feet above ground.

It was a powerful contrictor & had difficulty in pulling its coils off the gun barrel.
I shined a mammal in the top a Bassaricyon I suppose & knocked it down but could not find it. It remained in the tree for one hour while I reloaded for the gun & maul very slowly & may have been some other species.
(26) Santos went squirrel shooting & brought in a large red species. The Indians fed on yuca almost exclusively. The latter makes a chica of it & all are addicted to the stimulant. The day we arrived, a few fish & monkey met help out the diet. They grow also papayas & pine apples. Cotton is also planted & used for weaving cloth. Many in small quantities were seen in Dos Puntas. Went out hunting at night but saw nothing.
(27) Returned to Illurin & started at 7:30 Saw no monkeys or squirrels on journey except at rest of Pachaud where we met a troop of Cacajaos which skirred away at once. Found Wapiana Indians in camp returned from mouth of Cosiem. They reached mouth in 2½ days very steep & in places many cliffs & narrow ledges almost impassable.
they saw monkeys a single peccary & a troop brown Cebus. The tracks of a tapir were seen by the Indians in camp. Spent 2 nights. Heard & saw a few curassows & one other large bird. Two Maschigangas or Indians were met but except a few on river, they have left the district of mouth of Cosiem. Elevation 2,000 feet.
(28) Remained in camp labelling specimens. Day partly rainy but night clear.
(29) Broke camp & journeyed up to San Fernando. Day cloudy but no rain on trail. Santos shot a black curassow, a new ground dove & a flycatcher on trail. Saw no squirrels or other mammals. Met Louis returning with pack mules from Chanchamayo. At San Fernando found an old Indian man had taken possession of house with the Maschigunga boy Julio & another Indian.
(30) Went down to the San Miguel River with Julio the Maschigunga boy who speaks good Spanish. Saw a flock deer track & many old peccary tracks at a cocha near the river bank. In the peanut field near the road we saw fresh jaguar tracks in the soil. Santos returned without any mammals. Some Indians men brought in a small squirrel shot with an arrow & many up here. Went down trail about 2 miles & saw nothing. The Maschigangas are very hostile & have taken none of my traps although they have been with me when we set them.

Their cringing neighbors, the Indians of Xingu, were
treacherous thieves of corpses + untruthful as well.
The Mundurucus have great love for
pets + domesticate all the species found
except perhaps the macaw. Monkeys, parrots,
trumpeters + tortoises are found in great
numbers about their huts.

Oct. 1 Caught 2 tree rats like Matthew Piscbay
specimens, also a spiny mouse + a brown Didelphys. Santos brought in
2 Tamarin monkeys like those collected at
Altamira. He saw no other species.

(2) Rained during the night + in morning. Last
night + the night before heard howler monkeys
the road but saw or heard no birds. Caught
3 more tree rats in hut, 2 black Didelphys
+ a spiny mouse. Santos brought in a
small squirrel. Shot 4 new birds today,
a small blue + black flycatcher, a long billed
ground wren, a yellow warbler, + a ash-throated flycatcher.

(3) Caught 2 more tree rats, one spiny mouse +
2 brown Didelphys. Santos brought in a large
tinamou + quail dove. Shot a large red
billed pheasant cuckoo, Maguari + Gr. cormorant
in front of Altamira at 3 P.M. Very partly rainy
with no sun, the rain fell in short showers with
some thunder at a distance.

(4) Caught much the same species of mice but no
new ones. Julio brought in several lizards with
heavy spined tailed + green heads and Jose caught a small slender tailed lizard + several
slender striped + banded red + black snakes. Lizards are
seldom seen here however. Very cloudy with
rain showers at rare intervals.

(5) We broke camp at 10 A.M. and started for Jatoba. Very
bright + warm. Shot several new small
birds on way, one a metallic green + brown
a red tanager with black wings, a small
species of Indigo [illegible] creeper. We reached first
Jatoba at 5:30 in a heavy fog but the park
blankets + made tea. Rained
thundered during the night with much
lightening.

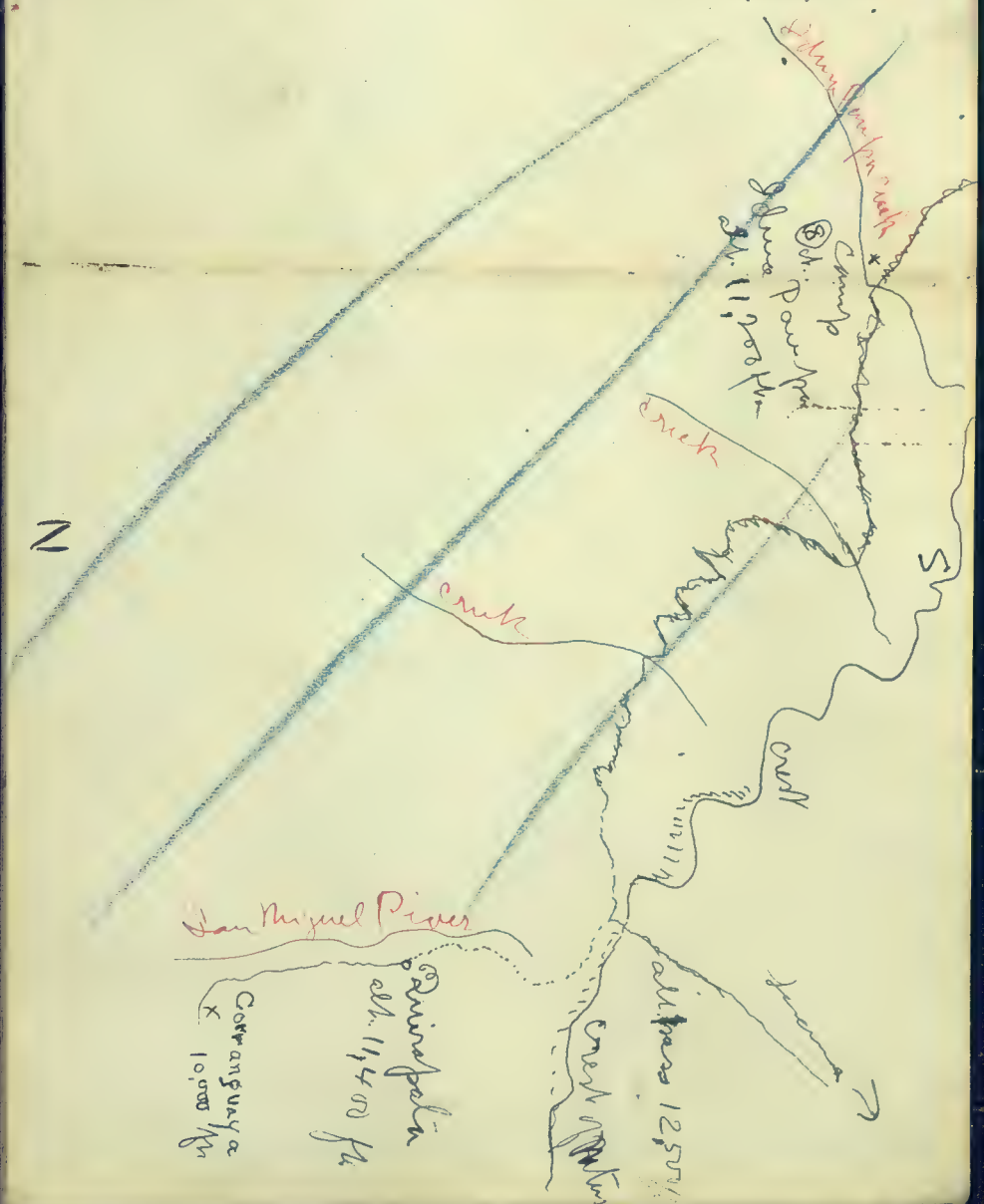
(6) Park Indian arrived at 8 A.M. Some travellers
up to the huts near the summit
arrived at 11 A.M. The day foggy with misty
rain. Saw many small birds + shot three
species of tinamou, ducks, many
several of the black [illegible] creepers, also black
robins + other familiar birds. Found 2
women + children in the huts but no men.
They had open cans, chickens + [illegible]
rice + potatoes + crops of [illegible]
here + the rocks are all cracked by [illegible]
rending a minute [illegible] but at first sight [illegible]

* This camping place is called Chiripata or Quiripata * has an altitude of 11,400 ft. by both of our aneroids which were corrected at Incuna. The last monkey I got this side the Cordillera Cumbrecata died at S. Fernando from the effects of climate after 4 days residence. They are very tender & all have died which have been taken to Incuna. According to the statements of natives they are the most delicate & gentlest monkeys in the low country but I believe they have never been exhibited alive owing to lack of hardiness to resist transportation.

(7) Caught 3 species mice, 16 specimens in all was a white bellied Rhipidomys, by Albert & myself & Pt. Mollatus, Marmosa clear & bright cool. M + Br. left for Incuna at noon.

(8) Th. morning rainy & could not start for Idma until 11 A.M. Travelled 4 leagues & camped at Idma Pampa near a cattle herders hut at head of bleak grassy valley. We crossed this two valleys run their head & camped in the third country everywhere granite & without forest except a few Polylepis & Groundsel trees. The country grass covered & met everywhere. Saw a few birds & no mammals. The altitude about 12,000 feet. All the rivers flow as Idma as Idma northward & around. The mountain crest here is chiefly bare smooth granite and

no snow fields nor seen anywhere else the altitude of crest must be about 15,000 feet.



Rio Urubamba
Postachiato
Rio Cosireni
Rio Convencion
Pamochiato
Mechiganga Vil
Arroyo
Rio Pontachiato
Uvini
Chu-guan-gir-ri
Rio Pangoacoas
Rio
Rio San Miguel

Iquide Urini – Mariana

Began work on Aug. 24 Paid 3 soles for 5 days
24–28, Paid 3 soles for 29 – Sept. 2

Salt –
Chocolate
oil
tea

Wants for Cumbaza
Mosquito bed net
Fish – net
10 shot shells
Flour sack
Steel traps
Bait set net as a fish trap. O.K.
place on large lake

Allantoxaurus
Oct.
Coast *
Clavipygopsides
Fish
Batrachians

M & F Oct.
Canibis
Money
Cigarettes
Tea
Milk

621 ♀	Akodon.	Poltalamula,	5000 ft.	plc.	18 Aug.
622 "	"	"	"	"	"
627 "	Oecomodus	Pinquina	9,500	"	19
628 "					
629 "					
630 "					
631 "					
632 "					
633 ♂					
645 "	Embryo Nazawa (parent 644)		Mirin	3,000 ft.	from. 27
646 "	Oryzomys				
650 "	Coendou	embryo, par. 649	"	"	" 30
663	Chrysothrix	"	" 662	Cumbaza	Sept. 6 Sept.
676 ♂	Vampyrus			cumbaza	abt. 7800 16
677 ♀	"		"		
~~709~~ "	Heteromys		S. Fernando	4,500	Oct. 2
710 "	Oryzomys black		"		
711 "	"		"		
723 ♀	Mus Rat		"		5
724 "	Oryzomys black		"		"
736 ♂	Akodon		Juanjuela	11,400 ft.	7
737 "	"		"		"
738 ♀	"		"		"
739 "	"		"		"

467	Trogon (Elvira)	Urvin 3 000 ft.	Aug. 25
468	House Wren	" " "	"
543	Brown Tanager	" " "	Sept. 20
544	White bellied Vireo	Cumbrecita 2 000 "	25
563	Broadbilled Yellow Warbler	S. Fernando 4 500	Oct. 3
567	Short-tailed Goldfinch	" "	"
575	White crested Tyrannulet	" "	"
576	Short-tailed Green Tanager	" "	4
577	Black headed Red Start Warbler	" "	"
578	Indigo Honey creeper	Tucumán 1 400	6
579	" "	" "	"

Juichua

Bear	o-kon-kon
~~Opossum~~ Deer	ta-ro-ka
~~Deer~~ Opossum	on-ka-ka
Viscacha	wis-cash-ya
Bat	mas-so (no special name for vampire or other species)
Rat =	mun-kra u-ko-cha
mouse =	u-ko-cha
vicuña =	vi-cun-ya
cat =	pu-ma
coyote	ok-to a-tlog (Tehuelche)
peccary	mon-te kon-chi
weasel	ach-ko-lya
skunk	anyas
Otter	chin-chan

Juichua names Birds

Condor =	con-dor
Vulture	wi-kri
parrot	kor-ro (Spanish
Hummer =	qquen-te
dove	ur-pe
robin	chi-wunk-ku
magpie / green jay	tian-tian
cassique	cho-sah
Chatchalaca	wah-la-li
Ani	ko-ko
Pampa cuckoo	ar-ri-ro
Woodpecker bill	kor-rick i-dor
Angel	muy-o-pisk-ku

Mouse - Sa-gar-ri (Madagascar)
Opossum = tin-sa

Kinkajou - pi-to
Brown Cebus Bo-ser-ri
Squirrel monkey - chig-gi-ri
Opossum ~~tin-sa~~ tin-sa
Zagolinx = Bom-aig-i-ma-ro
Small
Red squirrel

Fruit
Yellow tuberculate, = Gombe
Green Fig =
Olive like =
Black-berries

Madagascar
Hummer - Sun-Bir-ri
Blue Jay - Chaun-ri

Small-Banded Madagascar
Toucan - Pe-sel-ti
Pigeon wood - Sam-ba-chi
Kite - Pa-chi-a
Woodpecker - Cun-car-ri
Cassique-black Ca-cha-ri
Indian Oriole Pi-ri
Trogon Chi-gir-ri
Parakeet - Mi-mir-ri

5 kinds of Monkeys
Long Toed Rail cock
Guiana
" Caspa

MAMMALS
Otter - pa-ra-ri (River-cat Guiana Mapoyuma
Bush-dog = O-ca-te
Red Agouti = Sa-man-i
Rat = peeg-ri
Rat Mouse = say-gar-ri
Coati = ~~Co-a-ti~~ = car pis-u
Deer = ma-ni-do
Collared Peccary pe-ra-cha
Large " ar-til-yo-a-cho
Squirrel - mi-gir-ri
Red Howler Monkey ya-ri-ri
Large Black Spider " O-sch-et-to
Small " Tamarins. chi-mar-ri or chi-gir-ri
Night " ~~ki-mar-ri~~
Tapir ~~ki-mar-ri~~
Jaguar ma-chun-char-ri
Ocelot
Armadillo = pa-ter-ri
Prehensile-tailed Ateles - pa-par-ri
Agouti = ci-y-ra

Black Wood of Bora — Palm with prickly stem — pi-a-mi-chi

BIRDS

> Red Billed Turkey — Pan-hil

> White crested Pava — cay-u-ri

> White Penelope — pan-ga-ta

> Sun Bittern — chir-vi-mu

> Umbrella Bird — tu-gi-ta

> Yellow-tail Parrot — cin-tar-ro

> Blue-winged " — par-ret-to

> Blue-headed Trogon — chon-gon-ni

> Lavender Wood Pigeon — Dam-bach-i-ti

> Black-headed Magpie — ca-chi-to

> Crimson-breasted Tanager — chun-bi-ti

> Yellow-billed " — chin-con-vinta

> Broad Bore — pa-mor-ro

> Hummers — chun-gir-ri

Trees of Veragua

1 Raphia Palm — Ornamental, trees 30 feet long
2 Thatch " — Dwarf, trunk very slender.
3 Prickly leaved " " " Small size
4 Maiden hair-leaved " " " " "
5 Tree fern — abundant " "
6 Bright berry fruit — Tree small
7 " " small " — " giant
8 Pigeon berry fruit — " small
9 Cultivated Tree, Sizes gigantic - Largest tree
10 Ceiba " " "
11 Rubber tree — Here - None seen
12 Palo Santo — Common on Valley from Playa
13 Cecropia — Small leaved - Abundant
14 " — Large " — Rarer
15 Cedro — Common
16 Bow-wood - Thorny
17 Bramble - thorny - 30 ft. high - Cumbersome